

CLAIMS

What is claimed is:

1. A pharmaceutical composition comprising a polypeptide comprising a high
5 mobility group box (HMGB) A box or a fragment or variant thereof that can
inhibit release of a proinflammatory cytokine from a cell treated with high
mobility group box (HMGB) protein and an agent that inhibits TNF biological
activity, said agent selected from the group consisting of infliximab, etanercept,
adalimumab, CDP870, CDP571, Lenercept, and Thalidomide, in a
10 pharmaceutically acceptable carrier.
2. The pharmaceutical composition of Claim 1, wherein said polypeptide is a
mammalian HMGB A box.
3. The pharmaceutical composition of Claim 2, wherein said polypeptide is a
mammalian HMGB1 A box.
- 15 4. The pharmaceutical composition of Claim 3, wherein said polypeptide
comprises SEQ ID NO:4.
5. The pharmaceutical composition of Claim 4, wherein said polypeptide consists
of SEQ ID NO:4.
- 20 6. A pharmaceutical composition comprising an antibody that binds an HMGB
polypeptide or a biologically active fragment thereof and an agent that inhibits
TNF biological activity, said agent selected from the group consisting of
infliximab, etanercept, adalimumab, CDP870, CDP571, Lenercept, and
Thalidomide, in a pharmaceutically acceptable carrier.

7. The pharmaceutical composition of Claim 6, wherein said HMGB polypeptide is a mammalian HMGB polypeptide.
8. The pharmaceutical composition of Claim 7, wherein said HMGB polypeptide is an HMGB1 polypeptide.
- 5 9. The pharmaceutical composition of Claim 8, wherein said HMGB1 polypeptide comprises SEQ ID NO:1.
10. The pharmaceutical composition of Claim 9, wherein said HMGB1 polypeptide consists of SEQ ID NO:1.
11. The pharmaceutical composition of Claim 6, wherein said biologically active
10 HMGB fragment is an HMGB B box or a biologically active fragment thereof.
12. The pharmaceutical composition of Claim 11, wherein said HMGB B box consists of SEQ ID NO:5.
13. The pharmaceutical composition of Claim 11, wherein said HMGB B box biologically active fragment consists of SEQ ID NO:23.
- 15 14. The pharmaceutical composition of Claim 6, wherein said antibody is a monoclonal antibody.
15. The pharmaceutical composition of Claim 6, wherein said antibody is a polyclonal antibody.

16. A method of treating a condition in a patient characterized by activation of an inflammatory cytokine cascade comprising administering to said patient a composition comprising a polypeptide comprising a high mobility group box (HMGB) A box or a fragment or variant thereof that can inhibit release of a proinflammatory cytokine from a cell treated with high mobility group box (HMGB) protein and an agent that inhibits TNF biological activity, said agent selected from the group consisting of infliximab, etanercept, adalimumab, CDP870, CDP571, Lenercept, and Thalidomide.
17. The method of Claim 16, wherein said composition further comprises a pharmaceutically acceptable carrier.
18. The method of Claim 16, wherein said polypeptide is a mammalian HMGB A box.
19. The method of Claim 18, wherein said polypeptide is a mammalian HMGB1 A box.
20. The method of Claim 19, wherein said polypeptide comprises SEQ ID NO:4.
21. The method of Claim 20, wherein said polypeptide consists of SEQ ID NO:4.
22. The method of Claim 16, wherein said condition is selected from the group consisting of sepsis, allograft rejection, rheumatoid arthritis, asthma, lupus, adult respiratory distress syndrome, chronic obstructive pulmonary disease, psoriasis, pancreatitis, peritonitis, burns, myocardial ischemia, organic ischemia, reperfusion ischemia, Behcet's disease, graft versus host disease, Crohn's disease, ulcerative colitis, multiple sclerosis, and cachexia.

23. A method of treating a condition in a patient characterized by activation of an inflammatory cytokine cascade comprising administering to said patient a composition comprising an antibody that binds an HMGB polypeptide or a biologically active fragment thereof and an agent that inhibits TNF biological activity, said agent selected from the group consisting of infliximab, etanercept, adalimumab, CDP870, CDP571, Lenercept, and Thalidomide.
24. The method of Claim 23, wherein said composition further comprises a pharmaceutically acceptable carrier.
25. The method of Claim 23, wherein said (HMGB) polypeptide is a mammalian HMGB polypeptide.
26. The method of Claim 25, wherein said HMGB polypeptide is an HMGB1 polypeptide.
27. The method of Claim 26, wherein said HMGB1 polypeptide comprises SEQ ID NO:1.
28. The method of Claim 27, wherein said HMGB1 polypeptide consists of SEQ ID NO:1.
29. The method of Claim 23, wherein said biologically active HMGB fragment is an HMGB B box or a biologically active fragment thereof.
30. The method of Claim 29, wherein said HMGB1 B box consists of SEQ ID NO:5.

31. The method of Claim 30, wherein said HMGB1 B box biologically active fragment consists of SEQ ID NO:23.
32. The method of Claim 23, wherein said antibody is a monoclonal antibody.
33. The method of Claim 23, wherein said antibody is a polyclonal antibody.
- 5 34. The method of Claim 23, wherein said condition is selected from the group consisting of sepsis, allograft rejection, rheumatoid arthritis, asthma, lupus, adult respiratory distress syndrome, chronic obstructive pulmonary disease, psoriasis, pancreatitis, peritonitis, burns, myocardial ischemia, organic ischemia, reperfusion ischemia, Behcet's disease, graft versus host disease, Crohn's
10 disease, ulcerative colitis, multiple sclerosis, and cachexia.